

**COMMONWEALTH OF MASSACHUSETTS
DEPARTMENT OF TELECOMMUNICATIONS AND ENERGY
SECOND SET OF INFORMATION REQUESTS**

NSTAR Electric, D.T.E. 04-71
Date Issued: September 22, 2004

- DTE-C-12 Please refer to DTE-C-6 and DTE-E-15. NSTAR indicates it will limit work to daylight hours. For those seasons when daylight extends into the evening, i.e., significantly past 6:00 p.m., please discuss: (a) whether work hours typically conform to a “standard day” which does not routinely extend into the evening, and (b) whether work during evening hours would be an occasional rather than a regular occurrence. Please discuss measures the Company expects would be taken to ensure that any disturbance from work during evening hours is minimal.
- DTE-E-24 Please refer to DTE-E-12. Please provide an update on NSTAR’s request for information regarding the locations of private wells in Sherborn.
- DTE-E-25 Please provide cross-sectional graphs of the information provided in the response to DTE-E-22, parts a and b, presented so that current and future configurations can be directly compared, specifically by providing: (1) one graph showing (a) measured values, (b) modeled values for off-peak loading under the existing configuration, and (c) modeled values for off-peak loading under the proposed configuration; and (2) a second graph showing (a) modeled values for peak loading under the existing configuration, and (b) modeled values for peak loading under the proposed configuration.
- DTE-E-26 Please refer to DTE-E-23. Please identify the two locations at which angle structures would cause interference if the proposed alignment were moved closer to the center of the right of way. Please explain whether “modification of the structures” would involve proposed or existing structures, and how it would result in higher costs and circuit outages.
- DTE-N-13 Please refer to DTE-N-3 and DTE-N-4. NSTAR’s Transmission Planning Criteria reference the “NEPOOL and NPCC criteria specified in the NEPOOL Form No. FERC 715 filing.” Do the referenced criteria encompass all the criteria cited in the response to DTE-N-3? Besides the reference to the NEPOOL and NPCC criteria, are there any other provisions of NSTAR’s Transmission Planning Criteria that are relevant to the need for the proposed project? If so, please identify and explain the provisions.
- DTE-N-14 Please refer to DTE-N-6, parts b and c. Please provide the Department with some information to give an indication of the incidence of simultaneous failure of double-circuit transmission lines, in the NSTAR system or more generally in the industry. Over the last ten years or more, what is the past incidence in the

NSTAR system of failures due to the mechanisms cited in DTE-N-6, part c? How many miles of double-circuit transmission line were in operation in the NSTAR system over this period? Based on NSTAR's knowledge of experience representing a wider industry area, is the overall long term risk of simultaneous failure of double-circuit lines by all mechanisms likely similar to, or likely larger or smaller than, the actual past experience in NSTAR's system?

DTE-N-15 Please refer to DTE-N-7.

- a. Please describe the maximum extent of the "disconnection of service to some customer loads in the area" in the event of a simultaneous 433-507/282-602 fault. Indicate the approximate number of affected customers or amount of affected load, and the approximate duration of the service interruption. Assume that the operator-performed disconnection of customer load is "fast enough to prevent failure of the overloaded equipment."
- b. Taken alone, do the consequences in part a, above, justify the proposed project, based on any applicable criteria (NSTAR, NEPOOL/ISO-NE, NPCC)? Or does the need for the proposed project, based on applicable criteria, depend on the possibility that there would be subsequent failure of other supply lines in the area, potentially occurring "in a cascading manner?"

DTE-N-16 Please refer to DTE-N-2. Do the forecasted substation loads reflect a common rate of growth? Does the Company's forecast method reflect differences in load growth at the substation level, and if so how? If not, at what service area level does NSTAR's forecasting distinguish differences in subarea load growth?